

H.R. 1856, AS AMENDED
BY THE SUBCOMMITTEE ON ENVIRONMENT,
TECHNOLOGY, AND STANDARDS ON JUNE 5, 2003

1 SECTION 1. SHORT TITLE.

2 This Act may be cited as the “Harmful Algal Bloom
3 and Hypoxia Research Amendments Act of 2003”.

4 SEC. 2. RETENTION OF TASK FORCE.

5 Section 603 of the Harmful Algal Bloom and Hy-
6 poxia Research and Control Act of 1998 (16 U.S.C. 1451
7 note) is amended by striking subsection (e).

8 SEC. 3. SCIENTIFIC ASSESSMENTS AND RESEARCH PLANS.

9 Such section 603 is further amended—

10 (1) in subsection (a) by adding at the end the
11 following:

12 “In developing the assessments and research plans de-
13 scribed in subsections (b), (c), (d), (e), and (f), the Task
14 Force shall work with appropriate State, Indian tribe, and
15 local governments to ensure that the assessments and re-
16 search plans fulfill the requirements of subsections (b)(2),
17 (c)(2), (d)(2), (e)(2), and (f)(2). Additionally, the Task
18 Force shall consult with appropriate industry, academic
19 institutions, and non-governmental organizations through-
20 out the development of the assessments and research
21 plans.”; and

1 (2) by striking subsections (b) and (c) and in-
2 serting the following:

3 “(b) SCIENTIFIC ASSESSMENTS OF HARMFUL ALGAL
4 BLOOMS.—(1) Not less than once every 5 years the Task
5 Force shall complete and submit to the Committee on
6 Science of the House of Representatives and the Com-
7 mittee on Commerce, Science, and Transportation of the
8 Senate a scientific assessment of harmful algal blooms in
9 United States coastal waters. The first such assessment
10 shall be completed not later than 24 months after the date
11 of enactment of the Harmful Algal Bloom and Hypoxia
12 Research Amendments Act of 2003 and should consider
13 only marine harmful algal blooms. All subsequent assess-
14 ments shall examine both marine and freshwater harmful
15 algal blooms, including those in the Great Lakes and
16 upper reaches of estuaries.

17 “(2) The assessments under this subsection shall—

18 “(A) examine the causes and ecological con-
19 sequences, and economic costs, of harmful algal
20 blooms;

21 “(B) describe the potential ecological and eco-
22 nomic costs and benefits of possible policy and man-
23 agement actions for preventing, controlling, and
24 mitigating harmful algal blooms;

1 “(C) evaluate progress made by, and the needs
2 of, Federal research programs on the causes, charac-
3 teristics, and impacts of harmful algal blooms; and

4 “(D) identify ways to improve coordination and
5 to prevent unnecessary duplication of effort among
6 Federal agencies and departments with respect to
7 research on harmful algal blooms.

8 “(c) SCIENTIFIC ASSESSMENT OF FRESHWATER
9 HARMFUL ALGAL BLOOMS.—(1) Not later than 24
10 months after the date of enactment of the Harmful Algal
11 Bloom and Hypoxia Research Amendments Act of 2003
12 the Task Force shall complete and submit to the Com-
13 mittee on Science of the House of Representatives and the
14 Committee on Commerce, Science, and Transportation of
15 the Senate a scientific assessment of current knowledge
16 about harmful algal blooms in freshwater locations such
17 as the Great Lakes and upper reaches of estuaries, includ-
18 ing a research plan for coordinating Federal efforts to bet-
19 ter understand freshwater harmful algal blooms.

20 “(2) The freshwater harmful algal bloom scientific
21 assessment shall—

22 “(A) examine the causes and ecological con-
23 sequences, and the economic costs, of harmful algal
24 blooms with significant effects on freshwater loca-

1 tions, including estimations of the frequency and oc-
2 currence of significant events;

3 “(B) establish priorities and guidelines for a
4 competitive, peer-reviewed, merit-based interagency
5 research program, as part of the Ecology and
6 Oceanography of Harmful Algal Blooms (ECOHAB)
7 project, to better understand the causes, characteris-
8 tics, and impacts of harmful algal blooms in fresh-
9 water locations; and

10 “(C) identify ways to improve coordination and
11 to prevent unnecessary duplication of effort among
12 Federal agencies and departments with respect to
13 research on harmful algal blooms in freshwater loca-
14 tions.

15 “(d) NATIONAL SCIENTIFIC RESEARCH PLAN INTO
16 REDUCING IMPACTS FROM HARMFUL ALGAL BLOOMS.—
17 (1) Not later than 12 months after the date of enactment
18 of the Harmful Algal Bloom and Hypoxia Research
19 Amendments Act of 2003, the Task Force shall develop
20 and submit to the Committee on Science of the House of
21 Representatives and the Committee on Commerce,
22 Science, and Transportation of the Senate a research plan
23 providing for a comprehensive and coordinated national
24 research program to develop prevention, control, and miti-
25 gation methods to reduce the impacts of harmful algal

1 blooms on coastal ecosystems (including the Great Lakes),
2 public health, and the economy.

3 “(2) The research plan shall—

4 “(A) establish priorities and guidelines for a
5 competitive, peer-reviewed, merit-based interagency
6 research program on methods for the prevention,
7 control, and mitigation of harmful algal blooms; and

8 “(B) identify ways to improve coordination and
9 to prevent unnecessary duplication of effort among
10 Federal agencies and departments with respect to
11 the actions described in paragraph (1).

12 “(3) The Secretary of Commerce, under the Coastal
13 Ocean Science Program established under section 201(c)
14 of the National Oceanic and Atmospheric Administration
15 Authorization Act of 1992, and in conjunction with other
16 appropriate Federal agencies, shall establish a research
17 program that meets the priorities and guidelines estab-
18 lished under paragraph (2)(A). The Secretary shall en-
19 sure, through consultation with Sea Grant Programs, that
20 the results and findings of the research program are com-
21 municated to State, Indian tribe, and local governments,
22 and to the general public.

23 “(e) SCIENTIFIC ASSESSMENTS OF HYPOXIA.—(1)
24 Not less than once every 5 years the Task Force shall
25 complete and submit to the Committee on Science of the

1 House of Representatives and the Committee on Com-
2 merce, Science, and Transportation of the Senate a sci-
3 entific assessment of hypoxia in United States coastal wa-
4 ters including the Great Lakes. The first such assessment
5 shall be completed not less than 12 months after the date
6 of enactment of the Harmful Algal Bloom and Hypoxia
7 Research Amendments Act of 2003.

8 “(2) The assessments under this subsection shall—

9 “(A) examine the causes and ecological con-
10 sequences, and the economic costs, of hypoxia;

11 “(B) describe the potential ecological and eco-
12 nomic costs and benefits of possible policy and man-
13 agement actions for preventing, controlling, and
14 mitigating hypoxia;

15 “(C) evaluate progress made by, and the needs
16 of, Federal research programs on the causes, charac-
17 teristics, and impacts of hypoxia, including rec-
18 ommendations of how to eliminate significant gaps
19 in hypoxia modeling and monitoring data; and

20 “(D) identify ways to improve coordination and
21 to prevent unnecessary duplication of effort among
22 Federal agencies and departments with respect to
23 research on hypoxia.

24 “(f) LOCAL AND REGIONAL SCIENTIFIC ASSESS-
25 MENTS.—(1) The Secretary of Commerce, in coordination

1 with the Task Force and appropriate State, Indian tribe,
2 and local governments, shall provide for local and regional
3 scientific assessments of hypoxia or harmful algal blooms,
4 as requested by State, Indian tribe, or local governments,
5 or for affected areas as identified by the Secretary. If the
6 Secretary receives multiple requests, the Secretary shall
7 ensure, to the extent practicable, that assessments under
8 this subsection cover geographically and ecologically di-
9 verse locations with significant ecological and economic
10 impacts from hypoxia or harmful algal blooms. The Sec-
11 retary shall establish a procedure for reviewing requests
12 for local and regional assessments. The Secretary shall en-
13 sure, through consultation with Sea Grant Programs, that
14 the findings of the assessments are communicated to the
15 appropriate State, Indian tribe, and local governments,
16 and to the general public.

17 “(2) The scientific assessments under this subsection
18 shall examine—

19 “(A) the causes and ecological consequences,
20 and the economic costs, of hypoxia or harmful algal
21 blooms in that area;

22 “(B) methods to prevent, control, and mitigate
23 hypoxia or harmful algal blooms in that area and
24 the potential ecological and economic costs and bene-
25 fits of such methods; and

1 “(C) other topics the Task Force considers ap-
2 propriate.”.

3 **SEC. 4. PREDICTION AND RESPONSE PLAN.**

4 Section 603 of such Act is further amended by adding
5 at the end the following new subsection:

6 “(g) PREDICTION AND RESPONSE PLAN.—

7 “(1) DEVELOPMENT OF PLAN.—Not later than
8 12 months after the date of enactment of the Harm-
9 ful Algal Bloom and Hypoxia Research Amendments
10 Act of 2003, the President, in conjunction with the
11 chief executive officers of the States, shall develop
12 and submit to the Congress a plan to protect the en-
13 vironment and public health from impacts of harm-
14 ful algal blooms. In developing the plan, the Presi-
15 dent shall consult with the Task Force, the coastal
16 States, Indian tribes, local governments, industry,
17 academic institutions, and nongovernmental organi-
18 zations with appropriate expertise.

19 “(2) PLAN REQUIREMENTS.—The plan shall—

20 “(A) review techniques for prediction of
21 the onset, course, and impacts of harmful algal
22 blooms, including an evaluation of their accu-
23 racy and utility in protecting the environment
24 and public health and an assessment of the re-
25 sources required for their implementation; and

1 “(B) identify innovative response measures
2 for the prevention, control, and mitigation of
3 harmful algal blooms and identify steps needed
4 for their development and implementation.

5 “(3) PUBLICATION AND OPPORTUNITY FOR
6 COMMENT.—At least 90 days before submitting the
7 plan to Congress, the President shall publish a sum-
8 mary of the proposed plan in the Federal Register
9 for a public comment period of not less than 60
10 days.”.

11 **SEC. 5. AUTHORIZATION OF APPROPRIATIONS.**

12 Section 605 of such Act is amended to read as fol-
13 lows:

14 **“SEC. 605. AUTHORIZATION OF APPROPRIATIONS.**

15 “There are authorized to be appropriated to the Sec-
16 retary of Commerce for research, education, and moni-
17 toring activities related to the prevention, reduction, and
18 control of harmful algal blooms and hypoxia, \$29,200,000
19 for fiscal year 2004, \$30,700,000 for fiscal year 2005, and
20 \$31,200,000 for fiscal year 2006, to remain available until
21 expended. The Secretary shall consult with the States on
22 a regular basis regarding the development and implemen-
23 tation of the activities authorized under this title. Of such
24 amounts for each fiscal year—

1 “(1) \$3,000,000 for each of fiscal years 2004,
2 2005, and 2006 shall be used to enable the National
3 Oceanic and Atmospheric Administration to carry
4 out research and assessment activities, including
5 procurement of necessary research equipment, at re-
6 search laboratories of the National Ocean Service
7 and the National Marine Fisheries Service;

8 “(2) \$10,200,000 for each of fiscal years 2004,
9 2005, and 2006 shall be used to carry out the Ecol-
10 ogy and Oceanography of Harmful Algal Blooms
11 (ECOHAB) project under the Coastal Ocean Science
12 Program established under section 201(c) of the Na-
13 tional Oceanic and Atmospheric Administration Au-
14 thorization Act of 1992, with \$2,000,000 of such
15 amount used to carry out research on freshwater
16 harmful algal blooms;

17 “(3) \$2,000,000 for fiscal year 2004,
18 \$3,000,000 for fiscal year 2005, and \$3,000,000 for
19 fiscal year 2006 shall be used to carry out the re-
20 search program described in section 603(d)(3);

21 “(4) \$6,000,000 for each of fiscal years 2004,
22 2005, and 2006 shall be used to carry out the Moni-
23 toring and Event Response for Harmful Algal
24 Blooms (MERHAB) project under the Coastal
25 Ocean Science Program established under section

1 201(c) of the National Oceanic and Atmospheric Ad-
2 ministration Authorization Act of 1992;

3 “(5) \$5,000,000 for fiscal year 2004,
4 \$5,500,000 for fiscal year 2005, and \$6,000,000 for
5 fiscal year 2006 shall be used for activities related
6 to research and monitoring on hypoxia through the
7 Coastal Ocean Science Program established under
8 section 201(c) of the National Oceanic and Atmos-
9 pheric Administration Authorization Act of 1992;
10 and

11 “(6) \$3,000,000 for each of fiscal years 2004,
12 2005, and 2006 shall be used to carry out the activi-
13 ties described in section 603(f).”.

14 **SEC. 6. COASTAL OCEAN SCIENCE PROGRAM.**

15 Section 201(c) of the National Oceanic and Atmos-
16 pheric Administration Authorization Act of 1992 is
17 amended to read as follows:

18 “(c) COASTAL OCEAN SCIENCE PROGRAM.—

19 “(1) IN GENERAL.—There shall be in the Na-
20 tional Oceanic and Atmospheric Administration a
21 Coastal Ocean Science Program that supports Great
22 Lakes, estuarine, and coastal ocean research and as-
23 sessment through competitive, peer-reviewed, and
24 merit-based research programs.

1 “(2) PROGRAM ELEMENTS.—The Coastal
2 Ocean Science Program shall augment and integrate
3 existing research capabilities of the National Oceanic
4 and Atmospheric Administration, other Federal
5 agencies, and the academic community. Research
6 shall be conducted to improve predictions of eco-
7 system trends in Great Lakes, estuarine, and coastal
8 ocean resources; to better conserve and manage liv-
9 ing marine resources; to improve predictions of ef-
10 fects of coastal and Great Lakes pollution to help
11 correct and prevent environmental degradation; to
12 improve understanding and characterization of the
13 role oceans play in global climate and environmental
14 analysis; and to improve predictions of coastal haz-
15 ards to protect human life, personal property, and
16 ecosystem function.

17 “(3) AUTHORIZATION OF APPROPRIATIONS.—
18 There are authorized to be appropriated to the Sec-
19 retary of Commerce for implementing the Coastal
20 Ocean Science Program \$34,000,000 for fiscal year
21 2004, \$36,000,000 for fiscal year 2005, and
22 \$38,000,000 for fiscal year 2006.”.